Target Zero Awards Nomination
Achievements in Traffic Safety

Driving 101 – "It's Basic Safety"
Traffic Safety Corridor Project - Clallam County

Entry Form and Executive Summary

1) Category – Intersection Collisions, although the project covers a multiple number of the Priority One and Priority Two levels of Target Zero, including: Priority One – Impaired Driving and Speed-Related Collisions, Priority Two- Occupant Protection, Run-Off-Road Collisions, and Intersection Collisions. It was decided that Intersection Collisions would be the most appropriate for this entry (see Executive Summary, Number 4 below).

2) Driving 101 – "It's Basic Safety" Traffic Safety Corridor Project

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4) Executive Summary:

a) The Situation

Although the Driving 101 – "It's Basic Safety" Traffic Safety Corridor Project officially began on December 15, 2004 and officially ended on May 8, 2007, it continues to operate as the local members of the Steering Committee have decided to carry on the project despite the fact that the state is no longer funding the project.

Project History

Nine people died in traffic crashes within Clallam and Jefferson counties between Christmas Day 2003 and the end of January 2004. Such a high number of deaths within a relatively short period of time became a major cause of concern. Lieutenant Clint Casebolt, who was in charge of the area for the Washington State Patrol (WSP) contacted officials with the Washington State Department of Transportation (WSDOT). On February 6th, he traveled with Public Information Officer Glenn Tyrell to Olympia where they met with Olympic Region Traffic Engineer John Nisbet, Assistant Traffic Engineer for Operations Steve Bennett, and Public Information Officer Lloyd Brown of the WSDOT to assess the situation.

During the meeting, the group discussed the causes of the crashes, as well as, reviewed crash site analysis and other traffic data. They decided to embark on a public awareness and law enforcement effort while reviewing options for engineering improvements. On February 11th, Lt. Casebolt, Trooper Tyrell, and Lloyd Brown conducted a tour of local media outlets on the North Olympic Peninsula, including KONP radio, Peninsula Daily News, Sequim Gazette, Peninsula News Network, and the Port Townsend Leader. Their message was to encourage the public to contact the State Patrol and the Department of Transportation to share their concerns and possible solutions to preventing more deadly crashes. The response from citizens was tremendous. The two agencies received dozens of letters, phone calls, and email messages.

By February 23rd, a portable FM radio transmitter was positioned along Highway 101 near Sequim to broadcast information and safety messages to drivers. The messages encouraged drivers to pay close attention to their own driving and that of others. The message also informed motorists that the State Patrol was conducting additional patrols aimed at curbing aggressive driving. Despite those efforts, five more deaths occurred in March. It became evident that a much broader effort involving the community was needed to address the continuing carnage on the region's roadways.

Representatives from the Department of Transportation and the Washington State Patrol met with Program Manager Marv Ryser of the Washington Traffic Safety Commission (WTSC), in early April, to discuss a new initiative. The group decided that the establishment of a traffic safety corridor project might be the best approach to address the problem. Starting in 1993, the three agencies had begun working with local communities on developing traffic safety corridors. That year, they started four corridor projects in the state. The approach had proven that deaths and injuries could be reduced significantly by focusing enforcement, engineering, and public education efforts.

Additional members from the three state agencies, including George Kovich, Matt Enders, Don Clotfelter, Monty Mills, and Bill Riley, all with WSDOT, Monica Petersen-Smith of the WTSC, and WSP Trooper Brian George joined the group. In April, they invited Clallam County Sheriff Joe Martin and Jim Borte, Coordinator of the Clallam County DUI Task Force to assist in evaluating the feasibility of establishing a traffic safety corridor project. The expanded group held a series of planning meetings in April and May. They identified community leaders, stakeholders and citizens and invited them to attend a community forum to discuss the potential formation of a traffic safety project for Clallam County.

Sixty (60) people attended the June 7th forum in Port Angeles. Matt Enders with WSDOT presented an analysis of crash data covering a three year period (2000-2002). WTSC Project Manager Monica Petersen-Smith provided an overview of the history of corridor projects in the state. She also explained how the process works. Those in attendance agreed that the community would be supportive of the project. They elected Sheriff Joe Martin as Chairman of the Steering Committee.

After considerable discussion, the newly formed steering committee decided that the project area should include the area between the junction of SR 112 (Laird's Corner at MP 242.61) and the East Clallam County Line (Chicken Coop/Black Diamond Roads at MP 274.50). The 32 mile length of the project is one of the longest in the history of the state's program. The steering committee established three workgroups: law enforcement, engineering, and public education. Each group identified problem issues. On June 27th, the group began a series of meetings to work on developing an action plan.

Description of the Project Area

Highway 101 is the surface transportation artery for the Olympic Peninsula. This vital overland link encircles the 923,000 acre Olympic National Park. The vast majority of region's commerce is transported on 101 by truck. In addition, Highway 101 serves tourists traveling to Victoria, British Columbia via water ferries. It is the prime route for the 3.5 million annual visitors to Olympic National Park. The average vehicle traffic volume ranges from approximately 7,500 to 36,250 vehicles per day and consists of local, commuter, and tourism traffic. The mix of vehicles includes commercial trucks, passenger cars, SUVs, pickups, vans, recreational vehicles, buses, motorcyclists, and bicyclists.

The project area is located entirely within Clallam County, which has a population of 65,900 residents and a land area of 1,740 square miles. The highway bisects the two main population centers of the county. Located in the central area of the county along the Strait of Juan De Fuca, Port Angeles is the county seat and home of the Olympic National Park Headquarters. The popular recreational

center has a population of 18,530 (2004 - OFM Estimate). Sequim, situated in the east end of the county, is a nationally recognized retirement area and home to 4,585 people.

Most of the county is rural in nature, with 39,660 residents living in unincorporated areas and the remaining 26,240 citizens residing within the 3 cities. Forks is the third city with a population of 3,125. It located on the west end of the county 56 miles from Port Angeles and is also served by Highway 101. There are 51,804 licensed drivers and 80,064 registered vehicles in Clallam County (2002 DOL).

The project area is situated between the Strait of Juan De Fuca and the foothills of the Olympic Mountains. Within the project area, Highway 101 consists of 15.25 miles of two-lane roadway and 13.75 miles of four-lane highway. The remaining 3 miles inside the city of Port Angeles is comprised of a two-lane couplet and two-lane city streets. There is considerable congestion in Port Angeles area because of the population and commercial development. A divided four-lane section of the route bypasses the main business and residential areas of Sequim. The terrain along the project area is generally a mixture of open fields and forested areas.

Since it is the main surface transportation route for the region, there are numerous intersections with county roads and city streets. It also intersects with two other state routes. On the west end of the project, it intersects with SR112, which extends westward to Neah Bay. It also intersects with SR117, which is a truck route for traffic in Port Angeles. The speed limit varies from a 20 MPH school zone in Port Angeles to a top speed of 55 mph. The two-lane sections of the highway have limited safe passing zones. Wildlife crossing the highway is another significant danger with an average of two collisions occurring each month. Natural lighting along the project route is affected by trees which produce shaded areas.

The weather in the project area is temperate. In the summer, temperatures rarely exceed 85 degrees and in the winter, the temperature will occasionally dip below the freezing mark. There are very few times when the temperature will remain below freezing for an entire day. However, "black ice" can be a very serious problem for the region. The elevation along the route ranges from a few feet above sea level to about 300 feet. Significant snowfalls are very rare and seldom last more than three days.

Rainfall varies from an average of 17 inches in Sequim to 25 inches in Port Angeles. Most of the rain falls during the "rainy season" (October through April). Since the highway is located between the Strait of Juan De Fuca and the Olympic Mountains, it is affected by marine layers of cloudiness. Thick fog can be a very

serious impediment to safe driving conditions and may remain for couple of days at a time. In addition, the East/West orientation of the highway can produce significant glare problems during early morning and evening hours throughout the year. The highway also offers many outstanding scenic views that can be distracting to drivers.

Summary of Key Data Points

The following is a summary of the Key Data Points prepared by the Washington State Department of Transportation as part of their traffic collisions data report for the project.

Three Years of Data 2000, 2001, 2002:

- Total Collisions = 1,068
- Total Fatal/Disabling Collisions =36
- Total Alcohol-Related Collisions =51

Top 5 Collision Intersections:

- Monroe Rd/Pioneer Rd
- Del Guzzi Drive
- Mt. Pleasant Rd
- Old Olympic Highway/O'Brien Rd
- Kitchen-Dick Rd

Note: Number of collisions and age of drivers in each category are listed in parentheses (#)

Top 5 Leading Collision Types

- Rear End (354)
- Angle (210)
- Hit Fixed Object (129)
- Wildlife (73)
- Driveway-Related (71)

Top 5 Leading Contributing Causes

- Following Too Close (288)
- Failing To Yield (248)
- Exceeding Safe Speed (126)
- Improper Turn (56)
- Inattention (49)

Collisions by Month of the Year: December (103), October (101), August (97), July (95), September (88), June (87), May (86), April (85), November (79), February (75), January (71), March (65)

Collisions by Day of the Week: Saturday (192), Thursday (167), Friday (158), Tuesday (153), Sunday (140), Wednesday (137), Monday (85)

Collisions by Hour of the Day: 4 PM (99), 3 PM (95), 2 PM (92), 1 PM (90), Noon (85), 5 PM (81), 10 AM (65), 11 AM (64), 6 PM (57), 9 AM (46), 7 AM (43), 7 PM (36), 8 AM (35), 9 PM (33), 8 PM (22), 6 AM (15), 11 PM (14), 10 PM & 1 AM (11 each), 2 AM (10), Midnight (9), 4 AM (7), 3 AM & 5 AM (6 each)

Age of Drivers in Crashes: 18 (78), 19 (68), 17 (67), 16 (59), 20 (54), 41(46), 21 (45), 31 (40), 46 (39), 43 (38), 48 (37), 24 & 39 (35), 44 (34), 26 & 51 (33), 22 & 27 & 28 & 30 & 32(32), 45 (31), 34 & 37 (30)

For complete data packet, see Tab 2 (Port Angeles/Sequim Area Proposed Corridor Safety Project – U.S. Route 101 Collision Analysis, June 7, 2004). Data Source: Washington State Department of Transportation

b) Actions Taken

The Steering Committee for the project was highly motivated to move forward on the project as quickly as possible. Within six months, the group met in various committee meetings to develop a comprehensive action plan and kick-off the event by Christmas of 2004. The three workgroups were: Law Enforcement, Engineering, and Public Education. Using a data driven process for the project, the three workgroups developed an action plan that included: Problem Identification, Planned Action, Lead Agencies, Target Dates, and Desired Outcomes. **For the Action Plan Matrix see Tab 3 (pages 5 -12 of the Driving 101 Traffic Safety Project – Action Plan, 12/15/2004). Data Source: Washington State Department of Transportation.**

c) The Results

The Washington State Department of Transportation conducted a comparative analysis of pre-Project with post-Project implementation traffic data. **For the project results, see Tab 4 (Driving 101 Corridor Safety Project - Final Results, May 8, 2007)**. The comparison period for the pre Project period was 12/16/2000 – 12/15/2003 (36 months). The post implementation project period covered 12/16/04 – 02/28/07 (26.5 months). A complete three year data (12/16/2000 – 12/15/2003 pre-project period compared to 12/16/200 – 12/15/2007 post-project period) is expected to be released by the Washington State Department of Transportation in March of 2008.

The analysis revealed that there were several important improvements achieved during the project. **The Total Number of Collisions had decreased 1%** from an average of 367 per year before the project to 364 per year (post). **The Total Number of Injuries dropped 19%** from an average of 232 per year (pre) to 189 per year (post). **The Total Number of Fatal/Disabling Injury Collisions significantly decreased by 22%** from 13 per year (pre) to 10 per year (post) (**see page 5).** Other noteworthy results showed that the two top causes of collisions decreased as well. **Following Too Close Collisions were down 3%, while Failing to Yield dropped an amazing 18% (**see page 5 of the Final Results Report under **Tab 5**.

In terms of Collision Types, five of the eight categories (Angle, Sideswipe, Wildlife, Overturn, and Hit Pedestrian) showed decreases. While the other three collision types (Rear-end, Hit Fixed Object, and Driveway-Related) showed increases.

The comparison of Contributing Causes for collisions indicated that there were five categories that showed a decrease (Following Too Close, Failing to Yield, Improper Turn, Inattention, and Over Centerline). Just two collision categories increased slightly (Exceeding Safe Speed and Under the Influence). Apparently Asleep was the one Contributing Cause category that remained the same.

Another important measurable indicator of the success of the project and the public's support is the observed seat belt use rate. Over the past 12 years, Clallam County's Seat Belt Usage Rate has been among the top ten highest among the 19 counties measured in the annual state survey. During that period the county was number 1 a total of five times and ranked number 2 twice during the past dozen years.

Although, Clallam County's ranking fell to number 10 in the 2007 Report, it's seat belt usage rate increased ever so slightly moving (statistically insignificant from 96.3% in 2006 to a rate of 96.4% in 2007. It is noteworthy that rural counties, such as Clallam County, with lower speed city streets and rural roads tend to have lower usage rates than urban counties that have numerous state highways and interstates highways. The chart on the following page, covering the years from 1998 through 2007, shows Clallam County's excellent record for seat belt compliance.

Additional positive outcome measurements from the Project include the donation of an estimated 3,500 volunteer hours by members of the steering committee. In addition, it is estimated that more than 9,000 hours of service were performed by professional staff members from the various partner agencies, including state and local agencies.

The project also received frequent and extensive coverage by the local media outlets. More than 90 articles directly related to the Driving 101 Project appeared in local newspapers. The print media also ran editorials and letters from the public regarding activities of the project. The local radio station also provided extensive coverage on project activities through news coverage and the broadcasting of Public Service Announcements. The local cable news station also did and outstanding job of covering the Driving 101 Project. Many businesses made in-kind donations of time, services, and other support to the project.

Ultimately, the most important donations came from the members of the public who were willing to support the program by attending the various events and activities. They also responded to the messages by being more aware of traffic safety issues and ultimately by driving more safely.

One of the most significant initiatives of the Driving 101 It's Traffic Safety Traffic Safety Corridor was the improvements made on a portion of the highway with a reputation for dangerous driving conditions during inclement weather conditions and when drivers exceeded the speed limit or committed other traffic offenses. A triple fatality crossover head-on collision caused by an impaired driver on August 3, 2005 created a public outcry for action and focused the community's attention on the Driving 101 Traffic Safety Corridor Project. A detailed overview of the problems encountered and improvements made by the Steering Committee and the partner agencies can be found under **Tab 6.**

One additional significant outcome was a visit to Clallam County by Governor Christine Gregoire on July 8, 2005. The Governor along with 24th District State Representative Lynn Kessler (House Majority Leader), met with County Officials and members of the Driving 101 Steering Committee to discuss the proposed widening project for part of the Corridor slated for the 2009-2011 biennium. She met with the local officials for a half hour to discuss the Corridor and construction projects along a 1.15 mile section of the project, in which five deaths had occurred within a 14 month period (December 2003 and February 2005). See Tab 12 for newspaper article, "Gregoire commiserates on Highway 101 safety issues", (Sequim Gazette, 7/13/05) and the Letter to Representative Lynn Kessler from then Project Chair Sheriff Joe Martin, dated January 31, 2006.

5) Proven Strategies, Best Practices, and Innovative Strategies

The Action Plan included a number of Best Practices and Countermeasures proved to work by rigorous research (see Countermeasures That Work: A Highway Safety Countermeasure Guide For State Highway Safety Offices, NHTSA – Publication DOT HS 809 - 980, January 2006) including: Saturation Patrols

(Countermeasure 2.2, page number 1-16, Integrated Enforcement (2.3, 1-17), Preliminary Breath Test Devices (2.4, 1-18), Responsible Beverage Service (Compliance Checks, Server Training,) (5.1, 1-34), Designated Drivers (5.3, 1-37), Mass Media Campaigns (5.5, 1-39), Age 21 Enforcement (6.1, 1-41, Zero-Tolerance Enforcement (6.2, I-43), School Education Programs (6.3, 1-44), and Youth Programs (6.4, I-45).

In addition to those mentioned in the previous paragraph, the project has utilized numerous innovative and proven strategies, events, and activities to increase public awareness and to improve traffic safety. For a partial list and description of some of the innovative strategies, activities, and events used in the Driving 101 It's Basic Safety Traffic Safety Corridor Project, please see **Tab 5.**